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Civil defense is a planned, coordinated action to protect the population during any emergency whether arising from thermonuclear attack or natural disaster. The Federal Government has assumed four responsibilities--(1) to keep track of the nature of the threat which the civil defense program must meet, (2) to prepare and disseminate information about the threat and how it can be met, (3) to bear a major part of the costs of certain kinds of civil defense activities, and (4) to provide technical assistance through state and local channels for civil defense planning. A protection program in the school is an essential instructional and administrative element. Major aspects of a survey of school locale include--(1) survey of existing shelter potential, (2) man-made hazards, (3) natural disasters, and (4) human resources. (LD)

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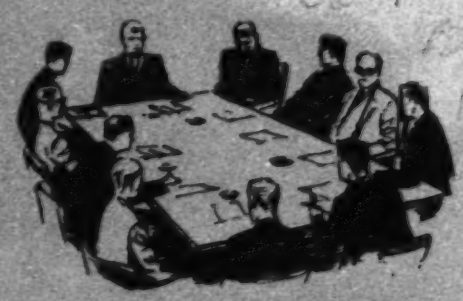
Schools and Civil Defense



ADMINISTRATION PROTECTION INSTRUCTION

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Wisconsin Board of
Vocational, Technical and Adult Education
Madison, Wisconsin

MP–26—January 1964

SCHOOLS
and
CIVIL DEFENSE

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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FOREWORD

Civil defense—planned, coordinated action to protect the population during any emergency whether arising from thermonuclear attack or natural disaster—is the responsibility of everyone. Civil defense concepts and applications are an essential part of learning to live efficiently. Therefore, civil defense education is an integral part of the school program.

Considerable work has been done by some state and local school systems in establishing civil defense programs. In recent years, the Office of Civil Defense of the Department of Defense has increased its efforts to guide the development of school civil defense programs and to coordinate them on a nationwide basis.

Schools and Civil Defense is designed to provide such guidance. It will help schools to develop and to improve current civil defense programs. Utilizing general considerations which can be applied to specific situations, the material has practical value in stimulating and guiding local and state groups in devising programs appropriate to their unique needs.

The need for civil defense education resulted in a 1956 document, produced by the NEA National Commission on Safety Education, entitled *Civil Defense Education Thru Elementary and Secondary Schools.* The present project is a substantial revision and updating of the original work, based on changing civil defense concepts and procedures which reflect technological advancements in the past few years.

Many educators throughout the country expressed a desire for a publication which would reflect the best current thinking on civil defense. To answer this request, the Commission brought together a committee of educators, representatives of national organizations, and consultants from the Office of Civil Defense, Department of Defense, and the Office of Education, U. S. Department of Health, Education, and Welfare.

For easy reference, a SCHOOL CIVIL DEFENSE CHECKLIST and a listing of SOURCES OF INFORMATION about various areas of civil defense education are presented at the end of this report.

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SCHOOLS AND CIVIL DEFENSE

THE CHALLENGE

Through the ages man's energies have been directed toward achievement of satisfaction and happiness for himself and others. Technological developments have been chiefly directed toward ways of making life fuller and more satisfying, and toward ways and means of improving the environment so that this objective can be more easily reached.

Scientific advances also carry the seeds of new problems and dangers. This has never been more clearly demonstrated than in man's ability to release nuclear energy. While making available an almost inexhaustible source of productive power, this achievement has also resulted in the development of weapons of tremendously destructive force.

But what has all this to do with schools and the educational process? Through education we seek to develop rational human beings. The fact that we have not completely succeeded in making all men rational, and the relationship of this fact to nuclear power and civil defense, was aptly expressed by the late President Kennedy: "This deterrent concept assumes rational calculations by rational men. And the history of the 20th century is sufficient to remind us of the possibilities of an irrational attack, a miscalculation . . ."

The existence of irrational men is indicated by the fact that men have engaged in war for unknown millennia. Does the fact that we have not succeeded in eliminating irrationality through education mean that we should burrow in the sand, in ostrich-like fashion, and give up the attempt? When one becomes an educator, he accepts one of the major principles on which the art and science of teaching is based—it is sound, both morally and philosophically, to strive to improve a situation even though one cannot do a perfect job of it. While we must recognize that irrationality and differences of opinion exist among men and nations of the world, we must do all we can to alleviate the causal conditions to the best of our ability within the domain of education. This is a function of the school.

But is civil defense education a concern of the school? There can be no doubt that children, as well as uninformed adults, are affected by speculations regarding the inevitability and consequences of thermonuclear war. It is the school's function to inform and protect children. Educators have a commitment to do their part to protect other members of the community, both physically and mentally, from the effects of a thermonuclear attack and from the feelings of utter futility and loss of faith in the human race that are bred by the exponents of irresponsible fatalism and irrationality.

What can schools do about it? Educators have a responsibility to inform themselves about the facts of living in a nuclear age. Educators need to

know the best, current thinking regarding civil defense. Educators need to be fully informed about community civil defense policies and procedures. Educators need to take an active part in implementing and coordinating individual school civil defense plans with over-all community programs. Educators need to help students and other members of the community become informed about the nature of the effects of nuclear attack and civil defense plans for such an eventuality.

Hopefully, war will someday be obsolete—conquered by the integrity of man. But in the face of the present threat, education can direct itself to the task of imbuing individuals with a sense of rationality about life in a nuclear age, developing a positive attitude regarding the inherent dignity of man, creating an atmosphere of optimism about *living* in the future rather than pessimism about mere survival. Even if war is eliminated, man will always be plagued with natural disasters. Civil defense is a natural corollary of this task—to protect and preserve life while searching for ways to make it better. *This, then, is the challenge.*

WHAT IS CIVIL DEFENSE?

The concept of civil defense is not new to American life. Only the term itself and its specific functions are new. As technological conditions change, civil defense functions and procedures change. Civil defense is planning for coordinated action to protect the population in periods of emergency, utilizing existing governmental structure adapted to emergency needs.

Today, the instruments of war are the most destructive of the man-made causes of devastation, and the potential of these devices is very great. We must learn to understand and live with them. We must accept as fact that there can be no complete security should such weapons be used. Lives would be lost; the problem is to devise methods of maximum protection. Blind fear in the face of danger can only result in panic or inaction; understanding, based on knowledge of the problem, can make possible protective measures known in advance which will lead to effective behavior in time of peril.

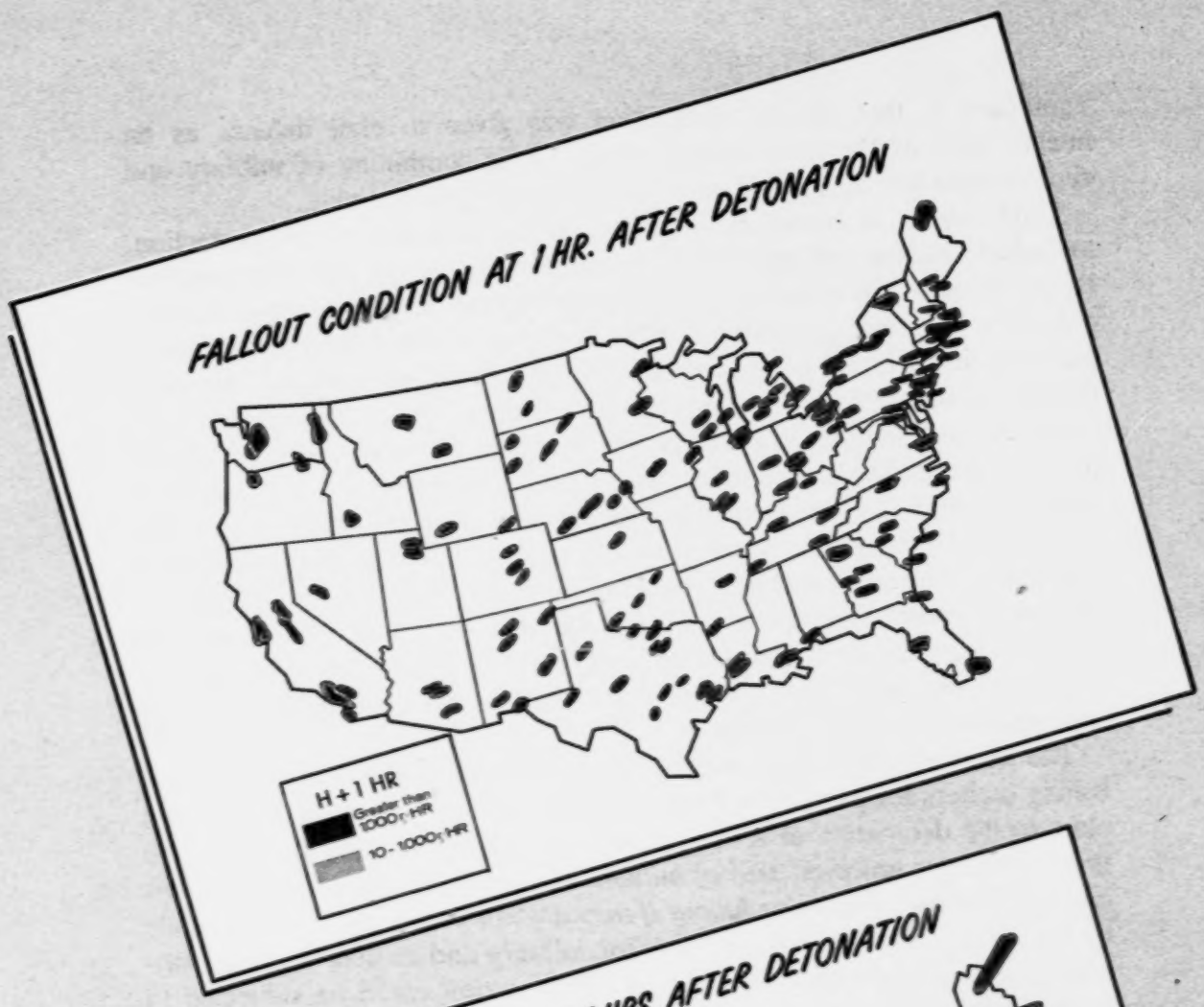
To meet the problems posed by the threat of enemy attack, civil defense was given formal status by Act of Congress in 1950 through the establishment of an independent federal agency to stimulate and assist states and local communities in making plans to minimize the effects of disaster and to advance the training of volunteer personnel. From 1950 to 1961 the civil defense program was reorganized several times, with each step adding to the scope and clarity of the program. In 1961, by order of the President, civil defense activities were transferred to the Department of Defense, and are now administered by its Office of Civil Defense. This was

significant in that official recognition was given to civil defense as an integral part of the total defense effort. This combining of military and civil defense increased unification of direction and planning.

Civil defense is based on extension of the principle of self-protection, to include mutual self-protection on the part of groups and communities. By participating in collective action for protecting the group, the individual enhances his own protection. Effective civil defense calls for advance planning at all levels of government—local, state, and national; planning flexible enough to accommodate changes in enemy tactics and weapons and comprehensive enough to cover people living under widely different conditions. To expedite this planning, the federal government has assumed four responsibilities: (1) to keep track of the nature of the threat which the civil defense program must meet; (2) to prepare and disseminate information about the threat and how it can be met; (3) to bear a major part of the costs of certain kinds of civil defense activities; and (4) to provide technical assistance through state and local channels for civil defense planning. However, state and local governments have the major operating responsibility for civil defense.

The key element in the national civil defense program is that of establishing shelters for protection from fallout of radioactive materials. Persons close to the detonation of a nuclear weapon will not survive the blast and thermal effects: however, *tens of millions of Americans alive after the blast can be killed by radioactive fallout if they are not protected.* Studies made by the Department of Defense, both for military and civilian defense planning purposes, show that virtually all of the nation could be subjected to fallout following a major attack. An example of the extensiveness of the fallout potential and the rate of decay of radioactive materials is given in the following sequence of maps which depict a hypothetical attack under random conditions. The maps show clearly that fallout can create a hazard for vast areas of the country. With different winds, or under other conditions, the pattern would vary—no part of the country would be immune from danger.

Materials giving complete details about radioactivity are available from local, state, and regional civil defense offices. At this point it is important to know only that people who have no protection from radioactive fallout will get sick, and if they have too much exposure, they will die. The converse situation is of great significance—*if people are protected from fallout, sickness and death will be greatly reduced and, in many instances, averted.* A consistent conclusion of the Department of Defense studies is that, under heavy attack, the number of lives that could be saved by fallout shelters would be tens of millions. Without going into technical details, it is also important to note that many existing buildings can give protection and, if these buildings are stocked with food and water, life can be sustained.

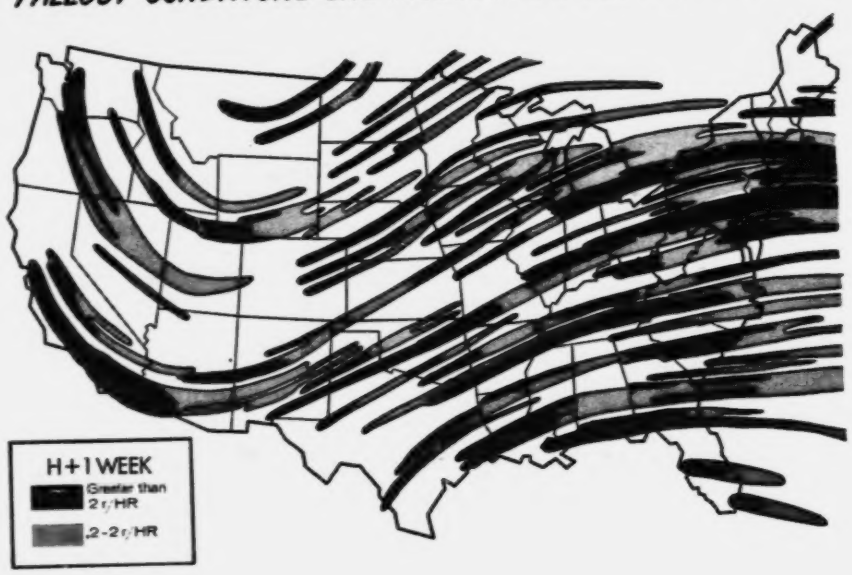

FALLOUT CONDITION AT 1 HR. AFTER DETONATION
H + 1 HR
Greater than 1000 r/HR
10 - 1000 r/HR

FALLOUT CONDITION AT 6 HRS. AFTER DETONATION
H+6HRS
Greater than 100 r/HR
1-100 r/HR

EXPLANATION

Assuming a *hypothetical* nuclear attack on 144 target areas of the United States, fallout spread and decay could follow the patterns shown. After one hour, fallout areas would be 30 to 50 miles long, depending upon wind speed. After six hours, fallout would spread over about 40 percent of the national land area. After one week, about one-third of the nation's area would still be covered by significant amounts of fallout. Dose rates in the affected areas would vary from about 3000 roentgens per hour (close to the point of detonation at one hour after the attack) down to a fraction of a roentgen per hour.

FALLOUT CONDITIONS ONE WEEK AFTER DETONATION



WHY CIVIL DEFENSE IN THE SCHOOLS?

The school is a traditional intellectual and cultural center, and thus exerts considerable influence on community life. This influence carries with it several responsibilities. Specifically, the school functions to educate children and youth to their maximum capabilities, and to provide leadership in community activities. Civil defense education and protection are logical extensions of these responsibilities to youth and the community.

Ultimately, all of education is directed toward helping children grow in ways of effective living—toward helping them develop the understandings and skills and outlooks that will enable them to meet the problems that confront them. New developments in thought and new scientific discoveries usually require modifications in our ways of living. It is appropriate, then, that educational programs be extended to include teaching about the implications of living in a nuclear age: factual explanation of nuclear energy, the extent and effects of nuclear forces, application of these forces in modern weapons of attack, survival procedures in this type of emergency, military and civil defense systems, and, to complete the picture, nuclear power in the service of society.

In view of the school's responsibility to care for the youth entrusted to it, a protection program is an essential element in the contribution of the school to civil defense. Such a program has both administrative and instructional aspects. It includes planned ways to care for the immediate physical safety and the sheltering of pupils in an emergency. Further, it provides for continuing the care of children until they can be turned over to their family groups. Each child must be familiarized with the kind of behavior he should follow in an emergency and be trained in doing the things expected of him. Older boys and girls might also be taught ways in which they could assist in caring for younger children.

Another aspect of the school's contribution to civil defense is its role in relation to the total community. This relationship has two facets: community coordination and service programs, and dissemination of civil defense information to adults. In time of disaster the school buildings and related facilities may be needed for emergency operations, and plans for cooperating with the total community civil defense effort are necessary. School-community cooperation is also required in the event disaster should occur when school is not in session and the school buildings must be used for sheltering the general population.

Education is a social process and as such cannot be separated from the total task of society. Consequently the interests and activities of the school should be closely related to community life. With reference to civil defense, the school can play a leadership role in informing adults about civil defense

plans and procedures. Adults must be made aware of the demands which would be placed upon them in case of attack or disaster and they need training necessary for competency in rendering essential services. Finally, it is important that parents be informed regarding the school's plans for caring for their children and the ways in which parents can be most helpful in making those plans effective. The schools can also take an active part in preparing and conducting civil defense courses. To do these things, educators—administrators and teachers alike—must be knowledgeable concerning civil defense.

THE PROTECTION PROGRAM

In developing the protection program, school personnel have an obligation to care for children under all circumstances. Special provisions for civil defense are, in reality, an indispensable part of the school's total safety program. Since each school is unique in both its internal characteristics and its community setting, no single plan can be established for use by all schools. Each school and school system must devise a plan suited to its own particular conditions. These plans need to be in accordance with and be a part of the total community civil defense program. The following suggestions identify some principal elements that can be considered by school personnel in civil defense planning for specific school situations.

Basic to planning an adequate protection program is an awareness of the types of danger likely to be met. A survey of the school locale can be conducted, in cooperation with the local civil defense director, to assess these dangers and to relate the survey findings to the total community survey. Major aspects of the survey are:

1. Survey of existing shelter potential in school buildings and nearby buildings. The Office of Civil Defense has conducted a National Shelter Survey in which it has identified those structures meeting minimum shielding requirements and those in which nominally priced improvements can provide additional shelter space. This information can be obtained upon request to the local civil defense director.
2. Man-made hazards in the vicinity of the school (e.g., oil and gas storage tanks) and how these would be affected by the various assumed hazards.
3. Natural disasters likely to occur in the area (e.g., flood, tornado).
4. Human resources—individuals and organized groups with the skills required to serve in the school protection program.

With such background data, the preparation of detailed plans can be undertaken.

Preparing the Plans

An emergency is not predictable concerning time of occurrence or precise effects. Plans and personnel must be ready to meet a wide variety of situations. When an emergency occurs, the maintenance of life depends on what individuals and groups are trained and ready to do at that moment. The planning and learning of protective behavior must be done in advance.

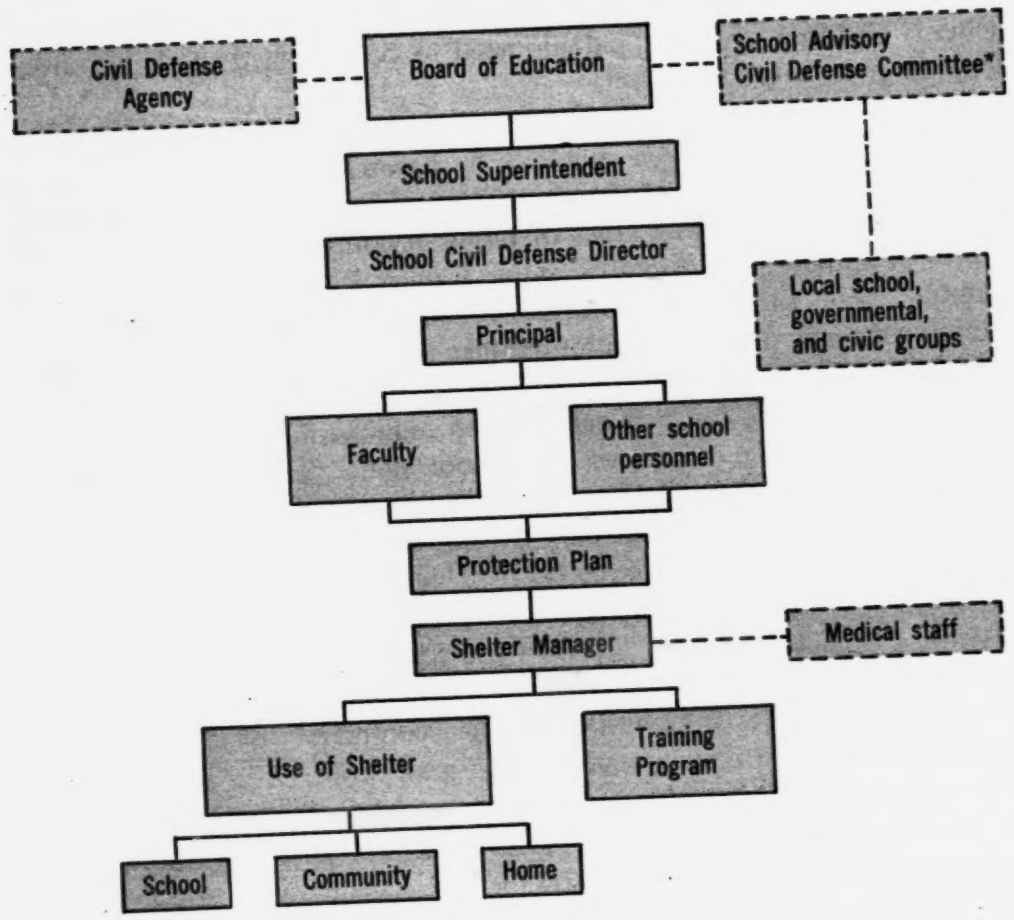
Plans are needed for each school, and these civil defense plans must be specific enough to give directions for immediate action and flexible enough to allow for adjustments and change as unexpected situations develop or as called for by variations in weapons technology.

1. Plans need to be devised in cooperation with the local civil defense director and must be in coordination with the total community plan.
2. A coordinator, preferably the principal (since, as the administrative head of the school, he is actively responsible for all segments of pupil protection) must be designated for planning and carrying out the civil defense program.
3. As many members of the school staff as feasible need to participate in developing the plans, since all personnel are affected by the plans. The students, in degrees varying with their maturity and abilities, might take part in the planning. Representatives of community service agencies and civic groups can be asked to participate. In this way each person will see clearly the relationship of his own duties to the total effort and the kinds of help that he may expect from others as parts of an organized whole. A suggested organizational structure for implementing civil defense planning in the schools is presented in the accompanying chart.
4. To the extent possible, civil defense plans can be related to the existing safety program to take maximum advantage of organized, functioning groups, such as the safety patrol.

As indicated in the suggested organizational chart, school civil defense begins with the establishment of a School Advisory Civil Defense Committee. The board of education and the school administration should include in this committee persons from all segments of the school personnel, and also members of community service agencies and civic groups. Including people of many talents will give a broad base for planning and development. As one of its first actions, the school planning group should contact the local civil defense director. He can provide guidance in developing the civil defense program for the school and in coordinating it with emergency planning among the various units of local government.

School civil defense plans need to be specific, and must provide for: a clearly defined communications system, including a distinctive warning signal which will reach to all parts of the building and grounds; shelter pro-

SUGGESTED ORGANIZATION PLAN FOR CIVIL DEFENSE



* Individual schools within a school system should establish a similar committee.

cedures; provisional care program (feeding, bedding, clothing); first aid; fire fighting; radiological monitoring; and rescue operations. These procedures need to be based on accepted civil defense programing.

Detailed civil defense plans can be made available in printed form and distributed to all school personnel. Copies of these plans must be filed with the local civil defense office, to insure maximum community coordination.

Some school buildings have shelter areas that provide adequate protection from fallout radiation. Many more school buildings provide very little protection from fallout although all buildings do provide some protection. But what happens when children are going *to* and *from* school? School bus drivers must be qualified to look after large groups of children and each

one must be thoroughly familiar with other shelters on his bus route (this information can be obtained from the local civil defense director). Pupils who walk to school must be made aware of their responsibility for their own safety—that in case of nuclear detonation they should seek the nearest shelter. Children and their parents need to be informed of shelter areas along the route taken to school.

If the school building does not provide adequate shelter, and if it would be more desirable, in a given situation, to dispatch children to their homes in an emergency because of a lack of other shelter areas, planning might include: in-school assembly areas of pupils residing near each other; procedures of gathering in assembly areas; trained leaders to take charge of assembly areas; and trained escorts for young children and handicapped children who may need the help of another person in getting home or to a safer shelter area.

Adequate planning for civil defense also requires that specific duties be assigned to specific members of the school staff. These responsibilities can best be assigned by considering individual interests, abilities, and normal spheres of work. The necessary training is available to prepare school personnel to be ready and able to do their part.

The Office of Civil Defense has established an extensive training and education program that is designed to provide the trained leadership and specialists required to effectively use shelter facilities and equipment. In this regard the Office of Civil Defense has contracts with the extension divisions of state universities and/or land-grant colleges in each state to hold conferences on civil defense for state, county, and municipal officials and to give instructor courses in shelter management and radiological monitoring. This program augments the training offered at the Office of Civil Defense schools in Brooklyn, New York; Battle Creek, Michigan; and Alameda, California.

As an incentive for teachers to take this training, some school systems allow credit for civil defense courses. In addition, the Office of Civil Defense will pay part of the expenses incurred by approved students in taking courses at the OCD Schools. Pertinent information regarding course offerings and procedures to follow for course registration can be obtained from either local or state civil defense officials.

Federal attention is also given to the need of every citizen to know how he will be warned of imminent attack, where he can take shelter, how he will live in the shelter, and what he may expect to find and do when he emerges from the shelter. A Civil Defense Adult Education Program sponsored by the Office of Civil Defense to provide citizens with these facts is currently being administered by the U. S. Office of Education through established state education systems.

Teachers can make a major contribution to their community and nation by taking the training which will qualify them to extend civil defense education to adult members of the community and which will enable them to do a better job of instructing and protecting school youth. Acquisition of civil defense preparation by many teachers will also assure that each school has staff members with the competencies and skills needed in shelter management and other civil defense skills essential to adequate disaster preparedness in the school. If several staff members have received this training, there is assurance that one of these skilled persons will be on hand at all times.

Checking and Testing the Plans

The protection plan of any school must ultimately be evaluated. The plans must therefore be tested under circumstances simulating a variety of emergency situations. Schools have long done this with reference to fire protection. The attitudes established toward fire-exit drills need only be extended to include emergency drills for other protective purposes.

The school building and shelter survey, conducted first as a basis for planning, requires continuing activity to insure readiness. Needed supplies should be available and in good condition. School personnel must evaluate the results of each practice drill. Aspects to consider might include: the signal system; the traffic plan to shelter area; the check-off used in accounting for personnel; the provision of supplies; and the planned program of activities for the shelter period. Lesson plans can also be developed at all grade levels for teaching, in shelter, the knowledge and skills required for post-shelter living.

The signal system, including warning devices and plans for receiving a warning, is a crucial aspect to be considered in the continuing evaluation. A *dependable* warning system is vital to execution of the civil defense plans. No one can know the number of minutes or hours of warning we might have before an attack. However, even brief warning received by radio or public warning devices will give precious, lifesaving time to act. It must also be borne in mind that there would be a significant period of time, several hours in many areas, between explosion of nuclear weapons and the arrival of radioactive fallout. The National Warning System, together with state and local warning systems are used to flash warnings throughout the states and their political subdivisions as indicated in the accompanying chart. Local warning devices vary from community to community. The most important considerations are that the devices be in sufficient number and of sufficient intensity to be heard by the entire community. Local Government Emergency Operations Centers will utilize an emergency broadcasting system as the primary means of giving instruc-

OFFICE OF CIVIL DEFENSE

NATIONAL WARNING SYSTEM

July 1, 1963

tions and other civil defense information to shelter occupants. Telephones are expected to be the principal means of two-way communication between community shelters and the local government emergency operations center, and it is also expected that the telephone system will be backed up in some cases by radio. The necessary communications equipment should be installed by the school, with warning devices in strategic areas and communication lines between shelters, and must be periodically tested to insure its adequacy and readiness for any emergency. Consideration should be given to new warning devices, as they are developed, for their implementation in the school warning and communications system.

Revision of the original plans in light of evaluation is an obvious step, as is testing of the revised plans. The protection program should be activated with sufficient frequency to keep everyone aware of it but not so often as to make it a dominating theme of the school program. Continuing evaluation is important in light of new construction, school additions, new personnel, and personnel changes.

THE EDUCATIONAL PROGRAM

Just as physical protection should be an integral part of the school program without dominating it, so civil defense education becomes a vital facet of the school curriculum—included as it contributes to the attainment of fundamental educational purposes. Daily experiences in effective living may be utilized in developing the desirable habits, attitudes, and knowledge that are basic resources in meeting any emergency. A first step in civil defense education would be instructing pupils in the procedures to be followed, including preparing them to meet the shock effects of disaster. In this task the teacher is all-important. A second step is to examine the present curriculum for existing contributions to civil defense objectives. Each school and each teacher should then work out ways for using the opportunities already provided in the school program and for making needed adaptations in order to incorporate new materials growing out of scientific developments. In meeting this responsibility, the instructional staff can be guided by the same principles that govern their work in other areas of the curriculum. The topics included here are for general guidance.

General Orientation

Pupil instruction in the procedures to be followed in the event of disaster is as important as the actual provision of physical protection.

Pupils will develop less anxiety under stress conditions if they are prepared to deal with the problem and have confidence in themselves and the adults with whom they are associated. The teacher can strengthen this feeling of security through behavior which itself demonstrates the qualities

of calmness and confidence it seeks to engender in children. How the teacher works with the class is as important as the skills and understandings that are developed. To the extent the teacher engenders positive attitudes among his students, he also indirectly influences the attitudes of parents with reference to the plans of the school and the total community civil defense program.

Effective plans for instruction of children in survival behavior provide for attention to two essential areas: (1) significant information about thermonuclear weapons effects, such information to be as accurate as present available knowledge can make it; and (2) specific behavior appropriate in an emergency.

An explanation of civil defense procedures is a basic instructional need. As in all instruction, methods and materials must be adapted to the maturity level of the learner. Each pupil needs to be familiar with the following areas:

Over-all civil defense plans for the school unit
Specific ways to behave in an emergency
Knowledge of organizations that assist in time of disaster
Recognition of warning signals and shelter procedures
Familiarity with activities appropriate to in-shelter time
Appropriate behavior if disaster occurs when school is not in session
Practice of school civil defense procedures until responses are learned.

Fundamental Information

Understanding of the concepts underlying nuclear energy, weapons effects, and methods of protection is necessary to develop a full appreciation of civil defense. The following areas of information can be studied in appropriate units in many areas of the curriculum:

Nature and structure of the atom
Significance of nuclear energy as a source of power
Nature of nuclear detonation—heat and light, blast, radiation
Nature of fallout
Nature and effects of radiation
Limitations of nuclear weapons
Shielding from fallout radiation
Shielding properties of materials
Peacetime uses of nuclear energy in industry
Uses of radioactive materials in medicine and other sciences
Effects of weapons on property
Effects of weapons on the human body
First-aid practices

Home nursing
Protection of the community water supply
Fire prevention and the chemistry of fire extinguishing
Food and water supplies for emergency use
Decontamination of materials affected by fallout
Living without modern conveniences—food preparation, sanitation.

Social Relationships

Knowledge is essential regarding the development of understandings about the world today, and the social and physical conditions that make it necessary for us to possess the mechanical means for sustaining ourselves and our institutions. Some pertinent areas of knowledge are: man's part in disaster and his methods of prevention; role of the individual as a member of cooperating groups—family and community; interdependence of communities and the concept of mutual assistance between disaster areas and disaster-free areas; community organization for protection and its development to meet changing needs—fire and police protection, health services, public utilities; social agencies concerned with prevention, relief, and rehabilitation of disaster areas; combating attacks using social weapons —rumor, propaganda, panic; use of communications media—newspaper, radio, television; and understanding of group action under conditions of abnormal stress.

As is evident, many of the areas listed are normally included in varying degrees in the school curriculum. The need is to demonstrate their relationship to the civil defense concept of mutual self-protection and to show their relevance to contemporary life.

For example, modern weapons and their effects are illustrative of the laws of physics and chemistry. Citing these weapons and effects within the context of nuclear power can be a convincing tool in the hands of science and mathematics teachers. History and social studies teachers can enhance their mission by pointing out the increasing involvement of civilian populations in recent wars, the existence of an armed peace in a bipolar world, and the possibility of an attack without formal declaration of war. Economics students could be introduced to the problems of emergency distribution measures and other problems stemming from the impact of an emergency on the economy.

There is an endless array of ideas that can be incorporated into all areas of the curriculum—it requires ingenuity on the part of the teacher. Content and method, as in all good teaching, must be related to the comprehension of the learners. Because of the nature of civil defense, many instructional materials must be locally prepared. The criterion to keep in mind, in addition to the principles of content preparation, is that civil

defense materials and their presentation to children must be designed neither to arouse too much anxiety nor to minimize danger. There are ways both to prevent disaster and to maintain life in its presence. Most children have learned to face common hazards without panic or unwholesome fear. They can learn to face new dangers in the same healthy way.

SCHOOL-COMMUNITY COORDINATION FOR CIVIL DEFENSE

In many communities the school is one of the largest buildings available in an emergency. It is often one of the most strategically located buildings with respect to population dispersion. Consequently, the school has a vital role in the local civil defense plans. It is essential that the school civil defense coordinator cooperate with the local civil defense director to insure that the school's plans are developed in harmony with the total community plans.

The foundation of the national civil defense program is at the local level. In the event of attack, there will be no substitute for local government and local civil defense programing as the principal tools for maintaining life during the first few weeks following attack. A local civil defense program requires the cooperation of all community organizations and individuals to be effective. The school has a significant function to perform in this regard.

As a first step, a schoo' system may arrange through local civil defense officials to have qualified school facilities licensed as public shelters. The license agreement indicates that the building has been identified and found acceptable as a shelter (i.e., it provides an acceptable level of protection from radioactive fallout and is adequate in terms of space and ventilation) by the National Fallout Shelter Survey conducted by the Office of Civil Defense. This agreement simply means that the school building can be used as a public shelter and it allows for the posting of SHELTER signs on the building. In reciprocation of this agreement, the Office of Civil Defense provides shelter supplies for the number of persons who could be adequately sheltered in the building. The supplies provided are listed in the accompanying chart.

After entering a license agreement, the first step in coordinating school plans with the local civil defense program is an inventory of the school building(s) and related facilities. Such an inventory is necessary to determine how the school can best fit into the community civil defense program. After this initial step, detailed and specific plans can be worked out by school personnel in consultation with the local civil defense director. The local civil defense director will be aware of state and federal programs to help provide financial and technical assistance in developing additional shelter space.

FALLOUT SHELTER STOCKING

Wheat-based biscuit and carbohydrate supplement:
10,000 calories per shelter space
14 quarts of stored water per shelter space
Steel water containers and plastic liners,
convertible when empty to chemical toilets
Medical kits for non-professional use
Sanitation kits
Radiation detection instruments.

It is essential that coordination of the school and community civil defense be carried out within the framework of the school's primary function—that of educating children. School buildings remain under the supervision of regular school personnel if disaster occurs while school is in session. Emergency functions must be discontinued as soon as practicable after a disaster or transferred to some other appropriate facility so that the school may resume its educational task. This is particularly important because of

the psychological and morale-building effect upon the entire community which may be achieved when children are busily at work and active in the usual ways of living.

The school building may be needed to provide shelter for persons from nearby areas. Specific details can be formulated in cooperation with the local civil defense office to meet such conditions.

Another aspect of the school's relationship to the total community is concerned with its contributions to the civil defense preparation of adults. The school building and its instructional facilities can be used as a training center to prepare adults for many types of civil defense services. To maximize the quality of such training, those teachers who express an interest in civil defense activities might be encouraged to enroll in civil defense courses to prepare them to teach adults in the community.

The school has an obligation to keep parents informed about the welfare of their children, and to interpret the role of the school to the general public. Communications media used to inform the home regarding normal protection needs can be used for civil defense purposes. When the usual and familiar channels are employed there is less danger of focusing undue attention on emergency preparations or of developing excessive fear and hysteria. Information can be given in such areas as:

School plans for safeguarding children

Contributions of the home in furthering the school program

Coordination of the school and community civil defense plans

Civil defense preparation in the home

Civil defense concept—mutual aid and protection.

Through the formal avenue of adult education and the informal associations of school personnel within the community, the school can do much to dissipate public apathy toward civil defense and can exert considerable influence toward making citizens better informed about civil defense, which in turn will lead to more adequate and more effective community civil defense planning.

School Personnel Responsibilities

The responsibility for a national plan of civil defense rests at the federal level with the Office of Civil Defense, Department of Defense. Responsibility for implementing these plans rests at the state and local government levels. Within this organizational framework, the schools have an obligation to indicate what they can contribute toward working out practical ways of meeting their obligation.

To be effective, civil defense programs demand a high degree of cooperation among all persons and agencies involved. There should be a willing-

ness on the part of school personnel to assume their responsibility in this regard. Part of this responsibility involves the stimulation of interest in civil defense from the policy-making and administrative levels of education; it is unrealistic for an administrator to expect interest from his staff if he does not manifest interest himself. A first step in meeting this obligation is to understand civil defense concepts, the hazards involved in emergency situations, and civil defense procedures to provide protection. Such information can be disseminated to staff members through professional development programs in civil defense. Staff members, in turn, pass this information and interest on to children and adults in the community.

This responsibility calls for recognition of the fact that the school is not the primary agent for organizing the total community civil defense program. A sound school civil defense instructional program will, by osmosis, enhance the total community civil defense effort.

Each community has its own individual needs in regard to civil defense planning. Each school system, and each school within a system, has its own specific operational procedures. A general allocation of functions for boards of education, administrators, and staff is suggested in the SCHOOL CIVIL DEFENSE CHECKLIST provided at the end of this report.

CONCLUSION

Civil defense—planned, coordinated action in an emergency—aims directly and immediately at the preservation of life and the maintenance of our democratic institutions.

Specific civil defense instruction today should be geared toward preparation for protection in the event of attack, with the firm hope that the attack will never occur. Civil defense planning is a realistic approach to the situation; realistic in that it demonstrates an awareness that not all of man's hopes are fully realized. Civil defense education seeks to prepare man to protect himself and others, so that he can go on to the ultimate goal of education—the development of fundamental and lasting human values.

If war should be eliminated from relationships among nations, civil defense skills will still be needed in times of natural disaster. These skills are the immediate and obvious outcomes of a well-coordinated civil defense education program.

When civil defense is presented as an on-going school and community activity, its significance as part of an evolving American tradition will become evident, and young people will come to understand why they must continue to be concerned with it.

SCHOOL CIVIL DEFENSE CHECKLIST

This checklist is intended to stimulate and guide action. It can be used as a yardstick by boards of education, administrators, and teachers to locate gaps in the civil defense program in their schools. Checklist items checked "Partly" and "No" will indicate where action is needed. Those concerned can ask, Why isn't this true in our school? and How can we change it?

Board of Education	YES	PARTLY	NO
Issues a clear statement of policy regarding school-community coordination in civil defense	____	____	____
Secures competent legal advice concerning the status of school personnel and school property in time of emergency, and during civil defense drills and exercises	____	____	____
Determines the adequacy of shelter space for pupils and staff	____	____	____
Considers (or reconsiders) school construction specifications in the light of school and community needs for shelter	____	____	____
Coordinates with other agencies for funds to cover extra costs of shelter provisions	____	____	____
Authorizes staff responsibility for civil defense	____	____	____
Provides incentive for faculty to participate in shelter management and other civil defense courses	____	____	____
Other items			
	____	____	____

School Superintendent	YES	PARTLY	NO
Assists the board of education in developing civil defense policy statement	____	____	____
Initiates, administers, coordinates, and evaluates the school civil defense plan	____	____	____
Organizes needed curriculum planning	____	____	____
Establishes in-service civil defense training for all school personnel	____	____	____
Implements changes in the civil defense plans based on evaluation	____	____	____
Coordinates school plans with community civil defense	____	____	____
Other items			
	____	____	____
School Principal			
Knows and understands his duties in carrying out school civil defense policies	____	____	____
Initiates and supervises his school plans	____	____	____
Coordinates plans with those of other schools in the community	____	____	____
Assigns staff responsibilities for civil defense	____	____	____
Secures civil defense materials	____	____	____
Incorporates civil defense material into curriculum	____	____	____
Conducts civil defense drills	____	____	____
Maintains continuous evaluation	____	____	____
Initiates needed revisions based on evaluation	____	____	____

	YES	PARTLY	NO
Keeps parents informed of current civil defense plans	____	____	____
Files copies of school plans with the superintendent and local civil defense office	____	____	____
Other items			
_____	____	____	____

School Teaching Staff

Participates to the extent feasible in making school civil defense plans	____	____	____
Participates in civil defense training programs	____	____	____
Participates in faculty studies leading to adaptations or revisions of the curriculum and instructional program to meet the need for civil defense education	____	____	____
Is familiar with specific procedures to follow in emergency situations	____	____	____
Provides practice in safety and emergency procedures in daily learning activities	____	____	____
Is prepared to provide activities and leadership for children during a period of enforced confinement	____	____	____
Is familiar with minimum first-aid procedures	____	____	____
Is familiar with psychological bases for working with children under stress of emergency conditions	____	____	____
Provides civil defense instruction appropriate to the grade level	____	____	____
Other items			
_____	____	____	____

Other School Personnel	YES	PARTLY	NO
Assist in the formation of civil defense plans for the school	____	____	____
Are competent in carrying out the civil defense functions assigned to them	____	____	____
Other items			
	____	____	____

SOURCES OF INFORMATION

Following is a helpful listing of sources of information concerning various areas of civil defense programing and education, rather than a listing of specific publications. This is dictated by the changing nature of weapons technology and attack assumptions, with consequent changes in civil defense procedures and planning, which make many technical publications obsolete in a short period of time. Requests to these resource agencies will result in procurement of the most up-to-date materials.

A. Guidance on shelter needs and specifications, and school construction

American Institute of Architects
1735 New York Avenue, N.W.
Washington, D. C. 20006

Federal, state, and local civil defense offices

State departments of education

B. Educational materials

National Commission on Safety Education, NEA
1201 Sixteenth Street, N.W.
Washington, D. C. 20036

Federal, state, and local offices of civil defense

State departments of education

U.S. GOVERNMENT PRINTING OFFICE : 1964 O—724-888

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NATIONAL COMMISSION ON SAFETY EDUCATION, NEA,
IN COOPERATION WITH
THE OFFICE OF CIVIL DEFENSE, DEPARTMENT OF DEFENSE